WHAT IS CLAIMED IS:

1. Cylindrical roller bearing comprising:

an outer bearing ring;

an inner bearing ring;

cylindrical rollers located between the outer bearing ring and the inner bearing ring;

one of the inner and outer bearing rings comprising side rims forming an axial stop for the cylindrical rollers;

at least one groove provided at the inner or outer bearing ring which does not include the side rims, the at least one groove being positioned axially outside the cylindrical rollers;

a ring of spring-elastic material positioned in the at least one groove to form an axial stop for the cylindrical rollers;

the ring having a periphery provided with no interruptions; and

the ring possessing a V-shaped cross-section with two legs.

2. The cylindrical roller bearing according to Claim 1, wherein the at least one groove comprises a pair of grooves, each groove being provided on the inner or outer bearing which does not comprise side rims and being located outside the axial extension of the cylindrical rollers, the

ring of spring-elastic material being positioned in one of the grooves and comprising another ring of spring-elastic material in the other groove.

3. The cylindrical roller bearing according to Claim 1, wherein the two legs of the ring join one another at a region of the ring that is directed towards a face of the cylindrical rollers that faces towards the ring.

4. The cylindrical roller bearing according to Claim 3, wherein the region of the ring at which the legs of the ring join one another is spaced by a distance from the face of the cylindrical rollers in an operating state of the cylindrical roller bearing.

5. The cylindrical roller bearing according to Claim 4, wherein the distance is between 0.1 mm and 1 mm, preferably between 0.2 mm and 0.5 mm.

6. The cylindrical roller bearing according to Claim 4, wherein the distance is between 0.2 mm and 0.5 mm.

7. The cylindrical roller bearing according to Claim 1, wherein the ring is made of spring steel.

8. The cylindrical roller bearing according to Claim 1, wherein the groove is formed as a peripheral ring groove.

9. The cylindrical roller bearing according to Claim 1, comprising a seal on the at least one ring, the seal comprising a sealing lip.

10. The cylindrical roller bearing according to Claim 9, wherein the sealing lip contacts the inner or outer bearing ring on which are provided the side rims.

11. The cylindrical roller bearing according to Claim 9, wherein the seal is vulcanized on the at least one ring.

12. Process for assembling a cylindrical roller bearing comprising:

bringing together an inner bearing ring and cylindrical rollers to form a premounted assembly, the inner bearing ring comprising side rims forming an axial stop for the cylindrical rollers;

axially pushing an outer bearing ring onto the premounted assembly comprised of the inner bearing ring and the cylindrical rollers so

that the cylindrical rollers are positioned between the inner and outer bearing rings, the outer bearing ring comprising at least one groove; and

axially pressing at least one ring of spring-elastic material into the groove, the ring having a periphery provided with no interruptions and possessing a V-shaped cross-section with two legs forming an angle between one another, the ring being axially pressed into the groove by elastically reducing the angle between the two legs of the ring so that an outside diameter of the ring is reduced to permit introduction of the ring into the groove.

13. The process according to Claim 12, wherein the ring is a first ring and the groove is a first groove located adjacent one axial end of the outer bearing ring, the outer bearing ring comprising a second groove located adjacent a opposite axial end of the outer bearing ring, the process comprising axially pressing a second ring of spring-elastic material into the second groove, the second ring possessing a V-shaped cross-section with two legs forming an angle between one another, the second ring being axially pressed into the second groove by elastically reducing the angle between the two legs of the second ring so that an outside diameter of the second ring is reduced to permit introduction of the second ring into the second groove.

14. The process according to Claim 12, wherein a seal comprising a sealing lip is provided on the at least one ring, the at least one ring being axially pressed into the groove so that the sealing lip contacts the inner bearing ring.

15. Process for assembling a cylindrical roller bearing comprising:

bringing together an outer bearing ring and cylindrical rollers to form a premounted assembly, the outer bearing ring comprising side rims forming an axial stop for the cylindrical rollers;

axially pushing an inner bearing ring onto the premounted assembly comprised of the outer bearing ring and the cylindrical rollers so that the cylindrical rollers are located between the inner and outer bearing rings, the inner bearing ring comprising at least one groove; and

axially pressing at least one ring of spring-elastic material into the groove, the ring having a periphery without interruptions possessing a V-shaped cross-section with two legs forming an angle between one another, the ring being axially pressed into the groove by elastically reducing the angle between the two legs of the ring so that an inside diameter of the ring is increased to permit introduction of the ring into the groove.

16. The process according to Claim 15, wherein the ring is a first ring and the groove is a first groove located adjacent one axial end of the inner bearing ring, the inner bearing ring comprising a second groove located adjacent a opposite axial end of the inner bearing ring, the process comprising axially pressing a second ring of spring-elastic material into the second groove, the second ring possessing a V-shaped cross-section with two legs forming an angle between one another, the second ring being axially pressed into the second groove by elastically reducing the angle between the two legs of the second ring so that an outside diameter of the second ring is reduced to permit introduction of the second ring into the second groove.

17. The process according to Claim 15, wherein a seal comprising a sealing lip is provided on the at least one ring, the at least one ring being axially pressed into the groove so that the sealing lip contacts the outer bearing ring.